In this lab, we will learn to use the following:

1. Use lists to store data
2. Use dictionaries to store data
3. Import modules
4. Basic functions
5. Implement algorithms to compute statistics

Start by downloading *50DayFruitData.txt* from D2L. Next you will need to create two files. The names should be

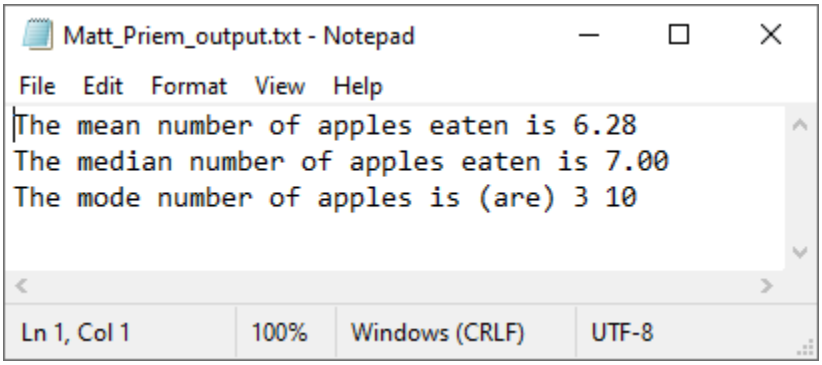
- FirstName_LastName_MyProgram.py
- FirstName_LastName_Stats.py

In FirstName_LastName_Stats.py create three functions named Mean, Median, and Mode that calculate the mean, median, and mode, respectively. Each one should accept a list of numbers as an argument. The Mean and Median should return a single number, and the Mode should return a list containing the mode(s).

Your FirstName_LastName_MyProgram.py should

- Get the information from the *50DayFruitData.txt* file.
- Use the functions defined in FirstName_LastName_Stats.py to calculate
  - The mean of apples eaten. (Only include days were apples were eaten).
  - The median of apples eaten. (Only include days were apples were eaten).
  - The mode of apples eaten. (Only include days were apples were eaten).
  - You don't need to make any calculations for bananas or strawberries.
- Output the mean, median, and mode values to a file named FirstName_LastName_Output.txt

You should get output similar to the following... (Averages may vary)



When you're all done upload all of the following to D2L

- FirstName_LastName_MyProgram.py
- FirstName_LastName_Stats.py
- FirstName_LastName_Output.txt

Hints:

- This is similar to last week's project. You may use some of those files as a starter.
- A data set could be multimodal, meaning it has more than one mode. Hence, why we are returning a list for the mode.
- Google dict.values(). Click Here.